

YUKHNOVETS, N. I.

PA 254775

Mar/Apr 53

R/Geophysics - Magnetic Anomalies

Variation in the Magnetic Properties of Mineral
Rocks in a Fracture Zone, G. N. Petrova and N. I.
Yukhnovets, Geophys Inst, Acad Sci USSR

AK Nauk SSSR, Ser Geofiz, No 2, pp 115-123

Explanation of the causes of the formation of negative magnetic anomalies which are adapted to the fracture zone. Measurement of magnetic susceptibility showed that rocks of the fracture zone are less susceptible than unbroken rocks of the same petrographic composition. Investigation by models gives

254775

reason to assume that even partial disruption of the vector of residual magnetization may be significant.

254775

YUKHNOVICH, A.N., veter. vrach (Yel'ninskiy rayon, Smolenskiy oblasti);
 RUDOMETKIN, Ya.S., veter. vrach; EVENTOV, M.Z., veter. vrach;
 SOBOLEV, A.S., dotsent (Estonskaya SSR); DOL'NIKOV, Yu.Ya., kand.
 veter. nauk; PALIMPSESTOV, M.A., prof.; SIMONENKO, N.M., dotsent;
 GONCHAROV, A.P., assistant; BEZRUKOV, A.A.; PROLENKOV, N.A., veter.
 vrach (Serov, Sverdlovskoy oblasti); KOSHCHHEYEV, P.M.; VOROB'YEV,
 M.M., kand. veter. nauk; YANCHENKO, P.Kh., veter. vrach;
 AMELIN, I.P.; BYCHKOV, A.I., kand. veter. nauk; SHVYREV, G.I.,
 veter. vrach (Stavropol'skiy kray); DANILIN, N.F.; TRUSHIN, A.Z.,
 veter. vrach; SKRYPNIKOVA, T.K., veter. fel'dsher; MIKHEYEV, A.D.;
 KARMANOVA, Ye.M., kand. biol. nauk; REMIZOV, Ye.S., mladehiy
 nauchnyy sotrudnik; ANTIPIN, D.N., referent

From helminthological practice. Veterinariia 38 no.7:55-58
 J1 '61. (MIRA 16:8)

1. Reshetovskiy veterinarnyy uchastok, Novosibirskoy oblasti (for Rudometkin).
2. Sovkhoz "Buda-Koshelevskiy" Gomel'skiy oblasti (for Eventov).
3. Sibirskiy nauchno-issledovatel'skiy veterinarnyy institut (for Dol'nikov).
4. Khar'kovskiy veterinarnyy institut (for Palimpsestov, Simonenko, Goncharov).
5. Blagoveshchenskiy sel'skokhozyaystvennyy institut (for Bezrukov).
6. Novo-Nikolayevskiy veterinarnyy uchastok Krasnodarskogo kraya (for Lochkarev).
7. Karpilovskiy veterinarnyy uchastok Chernigovskoy oblasti (for Ponomarenko).
8. Kamalinskiy veterinarnyy uchastok Krasnoyarskogo kraya (for Koshcheyev).

(Continued on next card)

YUKHNOVICH, M.V.

Injuries of the hands due to radiation. Vrach. delo no.9:49-53 S '61.
(MIPA 14:12)

1. Rentgenodiagnosticheskiy otdel (zav. - kand.med.nauk A.I.Pozmogov)
Kiyevskogo nauchno-issledovatel'skogo rentgeno-radiologicheskoy
onkologicheskogo instituta.

(RADIATION--PHYSIOLOGICAL EFFECT)
(HANDS--WOUNDS AND INJURIES)

YUKHNOVICH, M.V.

Diagnostic errors in a complex anomaly of the
12.11.73-74 '64.

1. Kiyevskiy nauchno-issledovatel'skiy sentral'nyy
onkologicheskiy institut im. P. A. Hrabovskogo

ACC NR: AP7008174

SOURCE CODE: UR/0138/67/000/001/001

AUTHOR: Epshteyn, V. G.; Zakharkin, O. A.; Polyak, M. A.; Yakubovich, S. G.

ORG: Yaroslavl Institute of Technology (Yaroslavskiy tekhnologicheskii institut)

TITLE: Effect of additions of SKD-10 liquid polymer on the technological properties of compositions made with 100 percent of synthetic butadiene rubber

SOURCE: Kauchuk i rezina, no. 1, 1967, 13-14

TOPIC TAGS: synthetic rubber, butadiene rubber, polymer, vulcanized rubber, technical property/SKD 10 polymer

ABSTRACT: A method is proposed for improving the technological properties of compositions made with carboxylated butadiene rubber by introducing SKD-10 liquid polymer. The introduction of liquid polymer does not cause a deterioration of the physicomachanical characteristics of vulcanized rubber. Orig. art. has: 2 figures and 2 tables.

[NT]

SUB CODE: 11/SUBM DATE: 11Jul66/ORIG REF: 003/

Card 1/1

UDC: 678.762.2:678.062.004.12

GOLOMBIK, M. S.; PETIN, N. N.; YUKHNOVSKAYA, O. P.

Moscow State University, Laboratory of Chemical Kinetics, (-1940-).

"The Question of the Inertness of Metals." Part II. "Periodic Phenomena on the Boundary (gratise) of Iron -- Nitric Acid Solutions."

Zhur. Fiz. Khim., Vol. 14, No. 5-6, 1940

SAMOYLOVICH, D.M.; BARINOVA, Ye.S.; VLASOV, A.A.; YUKHNOVSKAYA, O.P.

Investigating the sensitivity of emulsion B under various
processing conditions. Zhur.nauch.i prikl.fot.i kin. 5
no.1:56-57 JA-F '60. (MIRA 13:5)

1. Zavod tekhnicheskikh plastinok, Moskva.
(Photographic emulsions--Testing)

CA YUKHNOVSKAYA, O.P.

112

Effect of coenzyme factors on protein synthesis of biotin on the rate of incorporation of amino acids of tissues and organs. A. B. Konikova, the man, and O. P. Yakhnovskaya. Doklady Akad. Nauk S.S.S.R. 75, 67-69 (1950). Biotin acts to accelerate the incorporation of amino acids (labeled methionine) into proteins of blood, liver, brain, kidney, muscle, and skin in rats. In animals which were supplied with 10-25 γ biotin after 20 hrs. there was noted 43-76% increase of S-contg. components of the above-mentioned organs over controls which were given methionine alone. Possibly biotin acts as a coenzyme in the process. G. M. Kosolapoff

1951

² Radiomethionine and D₂O studies of the rate of turnover in rats with biotin deficiency. M. C. Johnston, R. K. Johnson, and G. P. Nye, *Endocrinology*, **55**, 100 (1954); *Endocrinology*, **56**, 100 (1955); *Endocrinology*, **57**, 100 (1955); *Endocrinology*, **58**, 100 (1956); *Endocrinology*, **59**, 100 (1956).

in the pattern of the different regions. In the case of the problems of regions of Italy with lower than the national average (II) per day on two successive days prior to the action of I raised its inclusion to normal. Effectiveness of young fish was a more pronounced negative effect than in the

rets. In vitro experiments with organ tissues gave the following results. Rate of inclination of I into the nucleus of the cells of the liver and spleen of the animals in which the infection was not observed was 100%. In the animals in which the infection was observed, the rate of inclination of I into the nucleus of the cells of the liver and spleen was 100%.

SAMOYLOVICH, D.M.; BARINOVA, Ye.S.; VLASOV, A.A.; YUKHNOVSKAYA, O.P.

Increase of the sensitivity and development compensation in type
"R" emulsions in glued condition. Zhur.nauch.i prikl.fot.i sin.
5 no.2:142-143 Mr-Ap '60. (MIRA 14:5)

1. Zavod tekhnicheskikh plastinok, Moskva.
(Photographic emulsions)
(Photography—Developing and developers)

CHEN YUEFA, L. I., ARLANEV (S. I.), FARINOVA, N. I. AM

"On the chemical ripening of the R emulsion"

Fourth International Colloquium on Photography (Corpuscular - Wave Theory)
Germany, 3-8 Sep 62

SAMOYLOVICH, D.M.; ARDASHEV, I.V.; BARINOVA, Ye.S.; RYABOVA, R.V.;
YUKHNOVSKAYA, O.P.

Investigating the chemical ripening of type R emulsions. Zhur.
nauch. i prikl.fot. i kin. 8 no.5:359-361 S-O '63.
(MIRA 1c:9)

SKIYAREVSKIY, Lazar' Yakovlevich, kand. med. nauk; YUKHNOVSKAYA,
S.I., red.

[Poisonous plants] Iadovitye rastenija. Moskva, Medi-
tsina, 1964. 47 p. (MIRA 17:11)

YAKOVLEV, Aleksandr Andreyevich, kand. med. nauk; YUKHNOVSKAYA,
S.I., red.; BASHMAKOV, G.M., tekhn. red.

[Prevention of myopia; advice to parents] Preduprezhdenie
blizorukosti; sovety roditeliam. Moskva, Medgiz, 1963. 15 p.
(MIRA 17:2)

VLASOV, Viktor Alekseyevich; YUKHNOVSKAYA, S.I., red.; PETROVA,
N.K., tekhn. red.

[Gastrointestinal diseases in young children] Zheludochno-
kischechnye zabolevaniia u detei rannego vozrasta. Moskva,
Medgiz, 1963. 18 p. (MIRA 17:4)

*

TSOPPI, Yelizaveta Ernestovna; YUKHNOVSKAYA, S.I., red.; PETROVA,
N.I.; tekhn. red.

[Care of the sick child] Ukhod za bol'nym rebenkom. Mo-
skva, Medgiz, 1963. 23 p. (MIRA 17:1)



NESTEROV, Anatoliy Innokent'yevich, prof.; YUKHEVSKAYA, S.I.,
red.; PRONINA, N.D., tekhn. red.

[Rheumatic fever] Revmatizm. Moskva, Medgiz, 1963.
40 p. (MIRA 16:11)

1. Deystvitel'nyy chlen AMN SSSR (for Nesterov).
(RHEUMATIC FEVER)

SHENK, N.A.; YUKHENOVSKAYA, S.I., red.; KOKIN, N.M., tekhr. red.

[Treatment of the sequelae of poliomyelitis] Lechenie
posledstviy poliomiellita. Moskva, Medgiz, 1963. 45 p.
(MIRA 17:1)

MANANNIKOVA, Nadezhda Vasil'yevna; BULYGINA, Yelizaveta Aleksandrovna;
ROMANOVSKAYA, Sof'ya Yul'yevna; SHESTAKOVA, Natal'ya Petrovna;
SHAPIRO, Sof'ya L'vovna; SHISHLYANNIKOVA, Mariya Abramovna;
NOVOSELOVA, Raisa Semenovna; POPOVA, G.F., red.; YUKHNOVSKAYA,
S.I., red.; KOKIN, N.M., tekhn. red.

[Course of lectures for gravidas and mothers] Kurs lektsii
dlia beremennykh i materel. 7 lektsii. 5 izd. Moskva, Medgiz,
1963. 238 p. (MIRA 16:7)

(PRENATAL CARE) (WOMEN—HEALTH AND HYGIENE)
(INFANTS—CARE AND HYGIENE)

NOVOSELOVA, Raisa Semenovna; YUKHNOVSKAYA, S.I., red.

[Influenza and pulmonary inflammation in young children]
Gripp i vospalenie legkikh u detei rannego vozrasta. Izd.5.
Moskva, Meditsina, 1964. 16 p. (Kurs lektsii dlia beremen-
nykh i materel, no.7) (MIRA 17:6)

RAU, Yelena Fedorovna; YUKHNOVSKAYA, S.I., red.

[Stammering in children of preschool age] O zaikanii
detei doshkol'nogo vozrasta. Izd.2. Moskva, Meditsina,
1964. 23 p. (MIRA 17:6)

LAPIN, Boris Arkad'yevich; LININ, Eran Petrovich; YUKHNOVSKAYA,
S.I., red.

[Monkey farm in Sukhum] Obez'iani pitomnik v Sukhumi.
Moskva, Meditsina, 1964. 53 p. (MIRA 17:6)

STARKOV, Gennadiy Leonidovich; YUKHNOVSKAYA, S.I., red.; LYUDKOVSKAYA,
N.I., tekhn. red.

[How to preserve and improve the vision; talks by an eye
doktor] Kak sokhranit' i uluchshit' zrenie; besedy glaz-
nogo vracha. Izd.3., perer. Moskva, Meditsina, 1964. 54 p.
(MIRA 17:3)

ZABLUDOVSKAYA, Yelena Davydovna; YUKHNOVSKAYA, S.I., red.

[Protect children from rickets] Oberegajte detei ot ra-
khita. Izd.2., ispr. 1 dop. Moskva, Meditsina, 1964. 55 p.
(MIRA 17:4)

IVAKHOVITSKIY, Nikolay Solomonovich; YUKHNOVSKAYA, S.I., red.

[Trichomoniasis] Trikhomonoz. Moskva, Meditsina, 1964.
17 p. (MIRA 17:11)

DOEROVOL'SKAYA, Aida Aleksandrovna; YUKHNOVSKAYA, S.I., red.

[Abortion hazards] Vred aborta. Moskva, Meditsina, 1964.
26 p. (MIRA 18:2)

KASHKIN, Pavel Nikolayevich, prof.; YUKHNOVSKAYA, S.I., red.

[Prevention of fungous diseases] Preduprezhdenie gribo-
kovykh zabolevaniy. Moskva, Meditsina, 1964. 31 p.
(MIR 17:11)

BULYGINA, Yelizaveta Aleksandrovna, kand. med. nauk; YUKHNOVSKAYA,
S.I., red.

[Hygiene of the woman during pregnancy and the puerperium]
Gigiena zhenshchiny vo vremia beremennosti i posle rodov.
Izd.8. Moskva, Meditsina, 1964. 38 p. (Kurs lektsii dlia
beremennykh i materei, no.2) (MIRA 17:12)

RAPIS, Yuriy Leonidovich; YUKHNOVSKAYA, S.I., red.

[Fluorography as a method for the early detection of
pulmonary tuberculosis] Fliuorografiia - metod rannego
vylavleniia tuberkuleza legkikh. Moskva, Meditsina,
1965. 17 p. (MIRA 18:5)

VLASOVA, Natal'ya Aleksandrovna; KOCHERGINA, Vera Sergeyevna;
YUKHNOVSKAYA, S.I., red.

[Stuttering is curable] Zaikanie izlechnimo. Izd.2. Moskva, Meditsina, 1965. 35 p. (MIRA 18:3)

ZHUKOVSKIY, Mikhail Aleksandrovich, doktor med. nauk; YUKHNOVSKAYA,
S.I., red.

[Endocrine diseases in children] Endokrinnye zabolevaniia u
detsi. Moskva, Meditsina, 1965. 57 p. (MIRA 18:2)

ZASLAVSEY, Naum Izrailevich, kand. med. nauk; 1918
med.

(Diseases of the tooth and the oral cavity)
zubov i polosti rta. Moskva, Meditsina, 1963. 28 p.
(1971, 1972)

RUBIOVA, Mariya Yakovlevna LEBEDEVVA, Aleksandra Filippovna
TALASOVA, Anna Vladimirovna, YENYOLKAYA, S. I.

Information of the Central Office of the
the USSR Ministry of Security, 1941-1945
1941-1945, 1946-1947, 1948-1949

DUL'TSIN, Yakev Abramovich, prof.; ROMACHEVSKIY, Gavrila
Ivanovich, kand. med. nauk; YURENOVSKAYA, L.I.
et al.

How to preserve woman's health? Kak sokhranit
zdrav'ye zhenskoy, Medicina, 1979.

1956, Yury Mikhaylovich, Prof. med. sci. 1956
1956,

[To women on cancer] Zhenshchikam o rake. Moskva. 1956.
1956, 1956. 20 p.

YAPPO, Tat'yana Aleksandrovna; YUKHNOVSKAYA, S.I., red.

[Training children in hygienic habits] Vospitanie gi-
gienicheskikh navykov u detei. Moskva, Meditsina, 1965.
29 p. (MIRA 18:9)

BRAGINSKAYA, Vera Pavlovna, kand. med. nauk; YUKHNOVSKAYA, S.I.,
red.

[Prevent infectious diseases in children] Preduprezhdaite
zaraznye bolezni u detei. Moskva, Meditsina, 1965. 33 p.

KRIVITSKAYA, E.I.; YUKHENOVSKAYA, S.I., red.

[Know how to work and know how to rest] Umel trudit'sia -
umel otdykhats! Moskva, Meditsina, 1965. 47 p.
(MIRA 18:10)

SECURITY: Sergey Alexandrovich: VIKTOR BLANKA, ...

... of the ...
... ..

YURENEV, Pavel Nikolayevich; YUKHNOVSKAYA, S.I., red.

[Prevention of rheumatic fever in children] Preduprezh-
denie revmatizma u detei. Moskva, Meditsina, 1965.
29 p. (MIRA 18:12)

VOLKOVA, L.S., kand. med. nauk; YUKHNOVSKAYA, S.I., rod.

[Life of the infant before birth] Zhizn' rebenka do rozh-
deniya. Moskva, Meditsina, 1965. 67 p. (MIRA 18:12)

OGRYZKOV, Nikolay Ivanovich; YUKHENOVSKAYA, S.I., red.

[Benefit and harm from drugs] Pol'za i vred lekarstv.
Moskva, Meditsina, 1965. 70 p. (MIRA 18:12)

YURENEV, Pavel Nikolayevich; YUKHNOVSKAYA, S.I., red.

[Prevention of rheumatic fever in children] Preduprezhdenie revmatizma u detei. Moskva, Meditsina, 1965. 29 p.
(MIRA 18:12)

MAKARENKO, Nikolay Pavlovich; NEGRIMOVSKIY, Moisey Isaakovich;
YUKHENOVSKAYA, S.I., red.

[Be careful in industry] Bud' ostorozhen na proizvodstve.
Moskva, Meditsina, 1965. 83 p. (MIRA 18:6)

GRANAT, L.N.; IVANOVA, V.V.; YUKHNOVSKAYA, S.Yu., red.

[For the young mother] Molodoi materi. Moskva, Meditsina,
1965. 34 p. (MIRA 18:6)

YUKHNOVSKAYA, T.L. [Iukhnovs'ka, T.L.]

Working model of a plant for producing sugar from beets. Nauk.
zap.Krem.derzh.ped.inst. no.4:103-107 '59. (MIRA 13:9)
(Sugar manufacture)

PYATIKOP, A.I., dotsent; BEZNOS, T.I., kand.med.nauk; LYUBETSKAYA, R.Ya.;
PARFILO, A.V.; YUKHNOVSKAYA, Ye.N.

Treatment of fungous skin diseases with griseofulvin. Vest. dermat.
i ven. 38 no.4:47-50 Ap '64. (MIRA 18:4)

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerologicheskii
institut (dir. - dotsent A.I.Pyatikop).

ALEKSIYEV, B.V.; IVANOV, Ch.P.; YUKHNOVSKI, Iv.N.

Stability and spectroscopic characteristics of the intermediate products formed in the nitration of some 2,3-disubstituted indones.
Dokl. AN SSSR 150 no.1:89-92 My '63. (MIRA 16:6)

1. Khimikotekhnologicheskiy institut, Sofiya, Bolgariya.
Predstavleno akademikom B.A.Kazanskim.
(Indone) (Nitration) (Spectrum analysis)

ALEKSIYEV, B.V.; IVANOV, Ch.P.; YUKHNOVSKI, Iv.N.

Interaction of 2,3-diaryl- and 2-aryl-3-alkylindones with nitrogen oxides. Dokl. AN SSSR 149 no.6:1315-1318 Ap '63. (MIRA 16:7)

1. Khimiko-tehnologicheskii institut, Sofiya, Bolgariya.
(Indone) (Nitrogen oxides)

L 42994-66 EMP(j)/T IJP(c) RM
ACC NR: AP6031801 SOURCE CODE: BU/0011/65/018/009/0817/0820

AUTHOR: Yukhnovskii, I.

ORG: Institute of General and Inorganic Chemistry, BAN

TITLE: Calculation of binding energies of complex molecules based on the method of coupling coefficients

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 9, 1965, 817-820

TOPIC TAGS: bond energy, molecular structure, electron energy, complex molecule, hydrocarbon

ABSTRACT: The method of coupling coefficients (Kh. S. Bagdasar'yan, Teoriya radikal'noy polimerizatsii (The theory of radical polymerization), AN SSSR, M., 1959) is especially simple and accessible among the proposed approximate methods for the calculation of π -electron energy of coupled molecules. This method was initially used for the calculation of alternating hydrocarbons and their radicals. The present article discusses, on the basis of Soviet and Western references, the possible extension of the method to the nonalternating and heteroatomic systems. The author discusses various pertinent necessary empirical energy graphs and establishes a nomogram for fast evaluation of π -electron energies which can be used for the evaluation of radicals and to find the localization energies. This paper was presented by Academician D. Ivanov on 18 May 1965. Orig. art. has: 3 figures. [JPRS: 34,518]

SUB CODE: 20, 07 / SUBM DATE: 18May1965 / ORIG REF: 001 / SOV REF: 008
OTH REF: 003

Card 1/1

101 AND 102 (GODS)

YUKHNOVSKIY, G. L.

Hydrogenation of phenols. G. L. YUKHNOVSKIY AND I. I. FURMAN. *Izv. Akad. Nauk SSSR, Khim. Tekh. Topl.* 1967-74(1967) - A detailed report of experiments on the hydrogenation of phenols. As a catalyst was used Ni freshly reduced by H₂ from NiO and used in amounts of 0.5% of phenol employed. Reaction starts at 160°C and at 180°C and 15-20 atm. 100 g absorb 0.7 l H₂ per min. The product, benzoin, is a solid, b.p. 150-60°, gives no reaction with FeCl₃. Detn. of OH by the method of Verley and Hölting showed 98.7% benzoin. This method, however, gives too low results unless the required acetylation is done by heating a 1-1.5 g sample with 20 cc of a mixt. of Ac₂O and pyridine in a small flask with a reflux condenser. From 0.1 m and 0.2 m pure and b.p. 160-170°C. The results were obtained that were 98.7-99.1, 90.2% pure and b.p. 160-170°C. The catalyst acts benchmarily on the process. Only cryst. phenol can be used. Even phenol must be carefully freed from S impurities. High temps up to 650°C do not accelerate the reaction, the same is true of high pressures. Technical phenols were treated under the extent of 26% into hydrocarbons of the methane series by heating at 500°C under 6 atm. and higher.

J. G. TOURIN

333-314 METALLURGICAL LITERATURE CLASSIFICATION

333-314 METALLURGICAL LITERATURE CLASSIFICATION

333-314 METALLURGICAL LITERATURE CLASSIFICATION

YUKHNOVSKIY, G.L.

Drying oil from cottonseed oil. G. I. Yakhnovskii.
Trudy Khim.-Tekhnol. Inst.-im. N. S. Kurnakova
No. 4, 89-102(1944) (in Russian).—Refined cottonseed oil
of sapon no. 194 and i. no. 130 was oxidized in an air
stream, then dehydrated. Oxidation, at 150°, in air
flowing at 60–80 l./hr., kg. oil, in the presence of Pb-Mn
resinate, gave, after 4 hrs., an acetyl no. of 79;
Mn resinate, gave, after 4 hrs., an acetyl no. of 79;
In drying to disappearance of stickiness it is concluded in
drying the oil oxidized in the presence of Pb-Mn is dark
colorless; the oil oxidized in the presence of oil of lighter color.
A less effective catalyst, but giving an oil of lighter color,
is Mn-Ca resinate. Without catalyst oxidation requires
about 1 hr. before giving an oil of poorer quality but very
light color. The temp. of 150° is optimum. Oxidation
at 130° gives an oil with very poor drying qualities. At
200° the oil is quick-drying but becomes very dark. If
a dark drying oil is acceptable, the oxidation is best carried
out with Pb-Mn, 16 hrs. at 150°, in an air stream of 170–
200 l./hr. kg. until a d. of 196 is attained. Oxidation
is accompanied by a fall of the i. no., thus, at 150°, in air
flowing at 60 l./hr. kg., without catalyst, the i. no. fell from
170–210 to 130–140; with catalyst, the i. no. fell from
170 to 102.7 and 93.3 in 4 and 8 hrs., resp., with Pb-Mn,
it fell to 83.6. The acetyl no. does not appear to be a
decisive criterion; thus, oxidation products of acetyl no.
79 and 145 gave drying oils of the same quality. De-
hydration of the oxidized oil is best carried out in the

presence of 3% Al_2O_3 and 2% fine Zn filings, preferably 1 hr. at 250-300°, more prolonged dehydration, 6-8 hr., results in somewhat better drying quality but also a darker color. Replacement of Al_2O_3 + Zn by corund. slightly best 95% of the oil gave a colorless drying oil, but the dehydration requires 3-4 times longer and the viscosity of drying is much lower. Replacement of Al_2O_3 + Zn with PbO + MnO_2 results in a completely colorless oil, too dark a color for use as a drying oil. The viscosity of the above oil is 1.05 at 25°C. and 0.65 at 100°C. through subsequent treatment with 10% $NaOH$ solution at 220-240°, resulting in a colorless oil. The loss of the acid no longer occurs, and the oil is a drying oil, the oxidized, light yellow, and extended product is mixed at 100° with gasoline, the white spirit, and turpentine 15%, total solvent 50%, and the mixture allowed to settle. The final viscosity is about the same as that of linseed oil. It is used with 2 in. Mn. and

At 100°C. the mixture is
is about 104% of the theoretical yield.
tent 25%. Made a mixture of 100%
from 100% of the theoretical yield.
extracted with strong alkali, gave
mass contg. 91.40% fatty acids. From this mass
is recovered by distn. Total recovery of 97%
97% or better.

LUTSKIY, A.Ye.; YUKHNOVSKIY, G.L.

Il'ia Ivanovich Strelkov; 1898-1954; obituary. Ukr.khim.zhur. 20
no.3:335-339 '54. (MLRA 7:8)

(Strelkov, Il'ia Ivanovich, 1989-1954)

Card 1/1

Doc. 147 - 26/1

Authors : Lu'by, A. E.; Yuchrowskiy, G. I.

Title : Ilya Ivanovich Strelkov

Periodical : Dokl. Akad. Nauk. 24/1. 205-206, 1974

Abstract : In commemoration of the first anniversary of Strelkov (1896-1954), a eulogy is presented, member corresp. of the Academy of Colloidal Chemistry Faculty at State of the scientific books written by Strelkov in his papers (1930-1954).

Keywords :

1974, 1954

YUKHNOVSKIY, G.L.; POPENTER, R.R.

Styrene reactions with vegetable oils. Zhur.prikl.khiz. 30
no.4:603-612 Ap '57. (MIRA 10:7)

1. Khar'kovskiy politekhnicheskii institut imeni V.I.Lenina.
(Styrene) (Oils and fats)

On the Properties of Copolymer Films on the Basis of Cyclopentadiene W
Vegetable Oils

ratio of 1 : 1. Excess solvents lead to an opalescence of turbidity. The film is highly glossy, irreversible, is characterized by an excellent adhesion, and has a high elasticity of 1 mm according to the NIILK scale (Nauchno-issledovatel'skiy institut lakokrasochnoy promyshlennosti - Scientific Research Institute of Lacquer and Dye Industry). Its hardness is considerably higher than that of oil paint coats. The highest hardness is, however, not obtained immediately (Fig 1, Table 1). The comparative investigation of cold and hot dried films has shown that the better quality of the former (Table 2). Oxygen is mainly taking part in processes of oxypolymerization only. In cold dried films a considerable amount of oxygen is added during longer drying. Thus, besides copolymers low molecular oxygen containing compounds are formed which are not water-tight and have a low mechanical strength. 2) The fractionation of the copolymer and the investigation of the isolated fractions (Fig has shown that it really is a copolymer and not a mixture of polycyclopentadiene with vegetable oil. 3) It was proved that tin tetrachloride which was used in the copolymerization as

SOV/153-58-5-17/28

5(1, 3)
AUTHORS:

Yukhnovskiy, G. L., Prilutskaya, N. V.

TITLE:

On the Properties of Copolymer Films on the Basis of Cyclopentadiene With Vegetable Oils (O svoystvakh plenok sopolimera na osnove tsiklopentadiyena s rastitel'nymi maslami)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 5, pp 100-106 (USSR)

ABSTRACT:

Most foreign patents concerning the film forming copolymers of cyclopentadiene with vegetable oils, alkyd resins, colophonium etc. recommend a temperature of 200-300° and the application of pressure during copolymerization. The products obtained in this way form rapidly drying films of high hardness and gloss, these films are, however, not sufficiently elastic and resistant to shocks. In an earlier paper (Ref 1) the authors had proved that it is possible to obtain a product meeting high requirements by the catalytic copolymerization of cyclopentadiene with e. g. linseed oil and alkyd resins (1 : 1) in the presence of stannic chloride (0.8-1 per cent by weight). This catalyst is dissolved in benzene or dichloro ethane. The copolymer produced in this way is soluble in chlorinated and aromatic hydrocarbons, turpentine, acetone, sulfuric ether and mineral spirit.

Card 1/3

SOV/153-58-5-17/28

On the Properties of Copolymer Films on the Basis of Cyclopentadiene With Vegetable Oils

ratio of 1 : 1. Excess solvents lead to an opalescence of turbidity. The film is highly glossy, irreversible, is characterized by an excellent adhesion, and has a high elasticity of 1 mm according to the NIIIX scale (Nauchno-issledovatel'skiy institut lakokrasochnoy promyshlennosti = Scientific Research Institute of Lacquer and Dye Industry). Its hardness is considerably higher than that of oil paint coats. The highest hardness is, however, not obtained immediately (Fig 1, Table 1). The comparative investigation of cold and hot dried films has shown that the better quality of the former (Table 3) is caused by a considerably lower content of oxygen (Table 2). Oxygen is mainly taking part in processes of oxypolymerization only. In cold dried films a considerable amount of oxygen is added during longer drying. Thus, besides copolymers low molecular oxygen containing compounds are formed which are not water-tight and have a low mechanical strength. 2) The fractionation of the copolymer and the investigation of the isolated fractions (Fig 2) has shown that it really is a copolymer and not a mixture of polycyclopentadiene with vegetable oil. 3) It was proved that tin tetrachloride which was used in the copolymerization as

Card 2/3

SCV/153-58-5-17/28
On the Properties of Copolymer Films on the Basis of Cyclopentadiene With Vegetable Oils
catalyst remains back in the copolymer as well as in the film without influencing the water-tightness and other properties of the films. There are 2 figures, 3 tables, and 11 references, 6 of which are Soviet.

ASSOCIATION: Khar'kovskiy politekhnicheskii institut, Kafedra tekhnologii lakov i krasok (Khar'kov Polytechnical Institute, Chair of Lacquers and Dyes)

SUBMITTED: December 13, 1957

Card 3/3

SOV/81-59-8-29646

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 8, p 588 (USSR)

AUTHORS: Yukhnovskiy, G.I., Rudenko, B.M.

TITLE: The Copolymerization of Oxidized Oil With Styrene

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1958, Vol 18, pp 135 - 142

ABSTRACT: It has been established by oxidation of refined sunflower oil under laboratory conditions (blowing through of air at temperatures of 80 - 160°C) that the maximum formation of conjugated dienes and peroxides in it takes place at 80 - 100°C. The copolymerization of styrene with oil oxidized at these temperatures and having a high viscosity, even without adding oils with conjugated double bonds (e.g., tung oil) into the reaction medium, produces a homogeneous product forming a transparent film. 15

N. Gardenin

Card 1/1

YUKHNOVSKIY, G.I.; PRILUTSKAYA, N.V.; CHERNOBAY, A.V.

Copolymerization of cyclopentadiene with vegetable oils.
Zhur. prikl. khim. 31 no.7:1091-1100 J1 '58. (MIRA 11:9)
(Polymerization) (Cyclopentadiene) (Oils and fats)

5(3)

AUTHORS:

Yukhnovskiy, G. L., Chernobay, A.V.

SOV/153-2-1-18/25

TITLE:

Polymerization of Cyclopentadiene (Polimerizatsiya tsiklopentadiyena)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 1, pp 96-101 (USSR)

ABSTRACT:

Cyclopentadiene (CPD) is not a very serviceable waste product of the coke plants of chemical industry. Due to two conjugated double bonds it has a high polymerization activity (Refs 1-5). Its polymer may be used as an underlying substance for varnishes. It can be polymerized both by the thermal and the catalytic method (see diagrams). In the air the polymer absorbs up to 20 wt% of oxygen and forms a powder with the total formula $(C_5H_6O)_n$. Polycyclopentadiene can be vulcanized in chloroform by sulphur sesquichloride. A brown, glassy, insoluble mass is produced by hydrogenation. There are only few data available of these processes. In this article the authors try to explain the possibilities of utilizing film-forming substances. In the experimental part they dealt with the action of the

Card 1/3

SOV/153-2-1-18/25

Polymerization of Cyclopentadiene

type of catalyst (Fig 1) on the trans-formation of CPD, the quantity of the catalyst, its concentration and that of the monomer (Fig 2), the action of the solvent (Fig 3), the properties of polycyclopentadiene, and finally the stabilization of polycyclopentadiene solutions. Table 2 contains the action of individual stabilizers on the viscosity of polycyclopentadiene solutions. The authors arrived at the following conclusions: The most efficient catalysts of CPD polymerization are complexes of boron trifluoride with organic substances (alcohols, ethers, and esters). At increased concentrations of the catalyst polycyclopentadiene is densified by the remaining double bonds. There are 3 figures, 2 tables, and 9 references, 5 of which are Soviet.

ASSOCIATION:

Khar'kovskiy politekhnicheskii institut; Kafedra tekhnologii lakov i krasok (Khar'kov Polytechnic Institute, Chair of the Technology of Varnishes and Dyes)

Card 2/3

85377

S/081/60/000/017/015/016
A006/A001

5.11.90 also 2209

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 17, p. 612, # 72080

AUTHORS: Yukhnovskiy, G.L., Prilutskaya, N.V.TITLE: Catalytic Copolymerization of Cyclopentadiene With Alkyd Resins
Modified by OilsPERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1959, Vol. 26, pp. 123-131

TEXT

The authors studied the process of copolymerization of cyclopentadiene (I) with alkyd resins (II) modified by oils. It was established that with a higher concentration of the catalyst (stannic chloride, III) the reaction is more intensive and heat liberation is greater. At a concentration of III equal to 0.9-1% of the total weight of the mixture, self-heating attains the boiling temperature of the solvent. Viscosity of the copolymer solutions obtained increases with higher concentration of III. Polymerization of I in the presence of complexes III with acetic acid proceeds more rapidly than in the presence of III, particularly at the initial stage. The effect of the acidity of II on the copolymerization process was studied on the example of II with various acidity

Card 1/2

85377

S/081/60/000/017/015/016
A006/A001

Catalytic Copolymerization of Cyclopentadiene With Alkyd Resins Modified by Oils

numbers. It is shown that in copolymerization of I with II, a great effect on the bonding rate is exerted by the amount of free phthalic anhydride contained in II; the highest reaction rate is observed in the case when the III: phthalic anhydride ratio = 1 : 0.5. The authors studied the effect of the fatness of II and the nature of oil on the copolymerization rate. When using resins of lower fatness, a higher reaction rate is observed. A technological process is suggested for obtaining copolymers I - II in the presence of III, as a result of which viscous liquids are developed producing fast drying films which show good adhesion, hardness and elasticity.

L. Payman

Translator's note: This is the full translation of the original Russian abstract.

Carl 2/2

02110

S/081/60/000/018/006/009
A006/A001

15.8105

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 18, p. 543, # 75438

AUTHORS: Yukhnovskiy, G. L., Brodskiy, I. Ye.

TITLE: Inhibition of Emulsion Polymerization of Methylmethacrylate

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1959, Vol. 26, No. 6, pp. 221-223

TEXT: For the purpose of reducing the intensity of the process of polymethylmethacrylate polymerization (in the presence of an initiator and emulsifier at 75 - 80°C) and of preventing the branching of the polymer chains with the formation of transverse bonds, a hydroquinone inhibitor was used as a regulator in an amount of 0.006% of the monomer weight. An investigation of the relative viscosity of polymethylmethacrylate solutions in dichlorethane, of the specific impact toughness and yield limit in static bending of polymethylmethacrylate bars with and without admixtures of hydroquinone showed that its introduction somewhat reduced the molecular weight and the specific impact toughness of the polymer. However these changes affect only slightly the physical properties of the finished product. Moreover, the use of hydroquinone has a most favorable effect on the technological process: homogeneity increases (in respect to the screen composition)

Card 1/2

85710

S/081/60/000/018/006/009
A006/A001

Inhibition of Emulsion Polymerization of Methylmethacrylate

as well as the yield of the commercial product; the conductance of the process is facilitated and the operational conditions of the equipment are improved.

T. Renard

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

SOV/80-32-5-30/52

5(3)

AUTHORS: Yukhnovskiy, G.L., Zu Hua-deng

TITLE: Epoxide Resins on the Base of Diphenylolethane (4,4'-Dioxydiphenyl-methylmethane) and Phenolacetaldehyde Resins

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1100-1105 (USSR)

ABSTRACT: The work is based on the raw material resources of Korea and intends to advocate the use of diphenylolethane (DPE) instead of diphenylpropane, in order to avoid the use of the deficient acetone, from which the substance is synthesized. At a molar ratio of 1-3 mole of epichlorohydrine (ECH) to 1 mole DPE three-dimensional polymers are obtained which are not soluble in any solvent. This is due to the presence of more than two functional groups in DPE. It is therefore necessary to use pure DPE without homologs. DPE was synthesized according to Vansheydt's method and then dissolved in benzene, toluene and xylene. The best solvent is benzene. On the benzene solution, the homologs are precipitated first. DPE is settling out in the form of crystals. DPE was synthesized at various phenol:acetaldehyde ratios, ranging from 4 to 1.

Card 1/2

SOV/80-32-5-30/52

Epoxide Resins on the Base of Diphenylolethane (4,4'-Dioxydiphenylmethane)
and Phenolacetaldehyde Resins

ratio of 4:1 together with DPE an equal amount of phenolacetaldehyde resin is obtained. The industrial DPE produced in Korea contains polyfunctional homologs of DPE. Pure DPE could be separated from it only in the amount of 1.5%. The principal product is phenolacetaldehyde resin.

There are: 2 tables, and 9 references, 4 of which are Soviet, 2 American, 2 German and 1 English.

SUBMITTED: January 6, 1958

Card 2/2

YUKHNOVSKIY, G.L.; RUDENKO, B.M.

Copolymerization of tung oil with styrene. Lakokras.mat.1 ikh
prim. no.3:32-35 '60.

(MIRA 14:4)

1. Khar'kovskiy politekhnicheskii institut imeni V.I.Lenina.
(Tung oil) (Styrene)

YUKHNOVSKIY, G.I., prof.; RUDEKO, B.M., inzh.

Characteristics of the oxidation of tung oil. Masl.-zhir.prom. 26
no.7:26-29 J1 '60. (MIRA 13:7)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina.
(Tung oil) (Oxidation)

BELEN'KIY, Ye.F. [deceased]; RISKIN, I.V.; YUKHNOVSKIY, G.L., prof.,
retsensent; RATNIKOVA, K.I., dotsent, retsensent; GOL'DBERG,
K.M., kand.tekhn.nauk, retsensent; IZYUMOV, V.B., inzh.,
retsensent; AYZENBERG, Ye.S., red.; POMKINA, T.A., tekhn.red.

[Chemistry and technology of pigments] Khimiia i tekhnologii
pigmentov. Izd.3., ispr. i dop. Leningrad, Gos.nauchno-tekhn.
izd-vo khim.lit-ry, 1960. 756 p. (MIRA 14:4)

1. Zavednyushchiy kafedroy lakov i krasok Khar'kovskogo politeknicheskogo instituta (for Yukhnovskiy). 2. Kafedra lakov i krasok Khar'kovskogo politeknicheskogo instituta (for Be-
(Pigments)

YUKHNOVSKIY, G.I.; CHERNOBAY, A.V.

Thermal copolymers of cyclopentadiene with vegetable oils.

Lakokras. mat. i ikh prim. no.6:20-22 '61.

(MIRA 15:3)

1. Khar'kovskiy politekhnicheskiy institut.

(Cyclopentadiene) (Polymers)

YUKHNOVSKIY, G. L.

3/081/63/000/002/082/000
2117/2126

AUTHORS: Yekhnovskiy, G. L., Velosyuk, V. M.
TITLE: Some factors influencing the composition of products prepared by alcoholysis of oils
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1963, 373, abstract 27312 (Lakhtasova, materialy i ikh prikladnye, no. 4, 1962, 16-20)

TEXT: It was found that when triglycerides are made to undergo interesterification the same ratios as are commonly used for glycerol (the theoretical content of monoglycerides in the mixture does not exceed 54-55%. At the same time the diglyceride content decreases, but not below 23-24%. If the product of interesterification in the equilibrium state is cooled below the lowest temperature required to ensure complete dissolution of the glycerol contained in the mixture, this results in a disproportionation of the composition and a decrease of monoglyceride content. Ethyl alcohol must not be used as solvent when checking the degree of alcoholysis. Methanol is recommended instead of ethyl alcohol.

Card 1/2

Some factors influencing the ...

[abstractor's note: Complete translation.]

2/083/65/000/002/082/088
B117/2188

Card 2/2

S/191/62/000/009/003/012
B101/B144

AUTHORS: Yukhnovskiy, G. L., Popenker, R. R., Kuznetsova, V. M.

TITLE: Cold-setting epoxy-acrylate compounds

PERIODICAL: Plasticheskiye massy, no. 9, 1962, 14 - 16

TEXT: With a view to improving the thermostability of cold-setting epoxy compounds and avoiding the need to use toxic hardening agents, the redox copolymerization of epoxy resin with polymethyl methacrylate in the presence of methacrylic acid as hardening agent was investigated. Three compounds were produced. Compound 1: A solution of dimethyl aniline in methyl methacrylate is poured into the ЭД-6 (ED-6) epoxy resin. Polymethyl methacrylate powder is then stirred in, a solution of benzoyl peroxide in methacrylic acid is added (ratio methacrylate:methacrylic acid = 2:1), and a filler is added to the finished compound if necessary. The setting time amounts to 20 - 30 min, thermostability to 88°C according to Martens. For compound 2, dimethyl aniline is dissolved in a mixture of styrene and methyl methacrylate. Since this compound too had a short setting time, the addition of polymethyl methacrylate was omitted for

Card 1/2

S/191/62/000/009/003/012
B101/B144

old-setting epoxy-acrylate...

compound 3. The setting time was 2 - 3 hr. Compounds 2 and 3 with marshalite as filler are suited for casting, or with a mixture of marshalite and asbestos they can be used as putty. The absorption of water after 170 hr was 0.17% for the casting compound and 0.33% for the putty. Compound 3 without filler has low viscosity and is suitable for casting into coils.

Card 2/2

YUKHNOVSKIY, G.L.; VOLOSUK, V.M.

Effect of some factors on the composition of the products of
oil alcoholysis. Lakokras.mat. i ikh prim. no.4,16-20 '62.
(MIRA 16:11)

YUKHNOVSKIY, G.L.; VOLOSUYUK, V.M.

Synthesis of alkyd resins with the method of step esterification.
Lakokras. mat. 1 ikh prim. no.5:18-21 '63. (MIRA 16:11)

SC-OKIN, Mikhail Fedorovich; LYALYUSHKO, Kapitonina Alexandra
 YURIEVICH, Olga, wife of Mikhail Fedorovich
 ALEXANDER, Leonid Leonovich
 ALEXANDER, Leonid, son of Leonid Leonovich

[Practical laboratory work on synthetic polymers for lac-
quers] Praktikum po sinteticheskim polimeram dlia lakov.
Moskva, Vysshaya shkola, 1965. 272 s. 41 A. 121

1. Zaveduyushchiy kafedroy Khar'kovskogo Politehnicheskogo
instituta im. V.I.Lenina (for Yukhnovskiy).

VIKHNOVSKIY, I.R.

Formula for approximation of binary function of
discrete variables. Determines and analyzes the zero and
1st approximation. Received 1 Aug 51.

On 1 Aug 51, I.R. Vikhnovskiy's method, "Theory of
approximation of binary functions of discrete variables",
1951, Moscow, USSR, Academy of Sciences Press, 1951, 104
pages. The presence of solved problems. The introduction of the discrete constant
into the theory of interaction. Derives a general

215789

215789

YUKNOVSKIY, I.R.

USSR/Physics - Electrolysis

MA 77

"Statistical Theory of Concentrated Strong Electrolytes. II," A. Ye. Glauberman, I. R. Yukhnovskiy, Lvov State U

"Zhur Eksper i Teoret Fiz" Vol XXII, No 5, pp 572-578

On the basis of the previous work [see previous abstract] and general statistical conceptions, derives a formula for the activity coeffs which in the case of small concns passes into the familiar Debye law. Compares theoretical and exptl data. Received 1 Aug 51.

219700

YUKHNOVSKIY, I.R.

GLAUBERMAN, A.Ye.; YUKHNOVSKIY, I.R.

"Superpositional" approximation in the theory of systems of interacting particles. Dokl. AN SSSR 93 no.6:999-1002 D '53. (MIRA 6:12)

1. Predstavleno akademikom M.A. Leontovichem.
(Particles) (Nuclear physics)

YUKHENOVSKIY, I. R.

"Binary Distribution Function for a System of Interacting Charged
Particles." Cand Phys-Math Sci, L'vov U, L'vov, 1954. (RZhKhim, No 17,
Sep 54)

SO: Sum 432, 29 Mar 55

Yukinovsky, I. R.

USSR

6776. The binary distribution function for a system of charged interacting particles. L. I. R. Yukinovsky. *Zh. eksp. teor. fiz.* 27, No. 6 (2) 693-8 (1954) In Russian. 530 162

A procedure is given for solving Boltzmann equations for a system of interacting particles of resultant charge $[N, N]$ Bogolyubov, *Problem of dynamical theory in statistical physics*, GTTL, 1947. The interaction is described by a phenomenological potential $\phi(r) = (1 - \epsilon^2)/r^2$. General expressions are derived for the 1st, 2nd, ..., k th approximations to the binary distribution function, with the corresponding expansion parameters. Correlation graphs are introduced. The method of calculation is well suited to rapidly increasing numbers with increasing k . Number of applications are not attempted.

AUTHOR: Yukhnovskiy, I. R.

56-2-16/51

TITLE: The Application of Collective Variables and the Taking Into Consideration of Short Range Forces in the Theory of the Systems of Charged Particles (Primeneniye kollektivnykh peremennnykh i uchet korotkodeystvuyushchikh sil v teorii sistem zaryazhennykh chastits)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol. 34, Nr 2, pp. 379-389 (USSR)

ABSTRACT: The present work calculates the free energy as well as the binary and the ternary distribution functions of the systems of charged particles, taking into consideration the short range forces. The first chapter of this work deals with the formation of the problem. Bogolyubov suggested the investigation of a compound problem: The calculation of the statistical integral of an ion system in which the short range forces in the coordinate space and the long range forces are described by collective variables. The present work is also dealing with the solution of this problem. The author investigates a system of ions of K .

Card 1/3

The Application of Collective Variables and the Taking Into
Consideration of Short range forces in the Theory
of the Systems of Charged Particles

56-2-16/01

different types in equilibrium and neutral as a whole, N_2 ions of any kind being present. The interaction is described by an "exact" potential. In the calculation of the free energy of this system a collective variable and a Fourier transform are introduced. Then an expression for the integral of configuration is put down. The potential energy of the Coulomb interaction is replaced by the potential energy of a system of harmonic oscillators and then the author integrates over the amplitudes of these oscillators. The potentials with short range are not expanded into a Fourier series but are left in the coordinate representation. Then a transition function for the Coulomb potential is deduced. The second chapter deals with the configuration integral for the case of the Coulomb interaction potential. The complete expression for the principal value of the statistical integral is an exponential function. Then a formula is deduced for the free energy of a Coulomb system and is also specialized for small concentrations. Then it is easy to pass on to the construction of the distribution functions and of the

Card 2/3

The Application of Collective Variables and the Taking Into
Consideration of Short Range Forces in the Theory
of the Systems of Charged Particles

56-2-16/51

thermodynamic functions with the taking into account in the interaction energy all central forces of long and short range. Also a system of ions in external fields can be investigated. By means of the results of the 2 above mentioned chapters the system of charged particles with exact interaction law can be investigated in two different ways obtaining the same results each time. The present work uses the method in which the characteristics of free energy as deducing potential are made use of. The course of calculation is followed step by step and the final formula found for the free energy is put down explicitly. There are 7 references, 5 of which are Slavic.

ASSOCIATION: L'vov State University (L'vovskiy gosudarstvennyy universitet)

SUBMITTED: June 15, 1957

AVAILABLE: Library of Congress
Card 3/3 1. Charged particles-Mathematical analysis

Yukhnovskiy, I. R.

24(8) 22

PHASE I BOOK EXPLOITATION

SOV/2809

Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk

Termodinamika i stroeniye rastvorov; trudy soveshchaniya...
(Thermodynamics and Structure of Solutions; Transactions of the
Conference Held January 27-30, 1958) Moscow, Izd-vo AN SSSR,
1959. 295 p. 3,000 copies printed.

Ed.: M. I. Shakhparonov, Doctor of Chemical Sciences; Ed. of Publishing
House: N. G. Yegorov; Tech. Ed.: T. V. Polyakova.

PURPOSE: This book is intended for physicists, chemists, and
chemical engineers.

COVERAGE: This collection of papers was originally presented at the
Conference on Thermodynamics and Structure of Solutions sponsored
by the Section of Chemical Sciences of the Academy of Sciences,
USSR, and the Department of Chemistry of Moscow State University,
and held in Moscow on January 27-30, 1958. Officers of the
conference are listed in the Foreword. A list of other reports

Card 1/10

Thermodynamics and Structure (Cont.)

SOV/2809

also read at the conference, but not included in this book, are given. Among the problems treated in this work are: electrolytic solutions, ultrasonic measurement, dielectric and thermodynamic properties of various mixtures, spectroscopic analysis, etc. References accompany individual articles.

TABLE OF CONTENTS:

Foreword	
Glaubergerman, A. Ye. Present State and Some Problems of the Molecular Theory of Electrolytic Solutions	3
Yukhnovskiy, I. R. Statistical Theory of Charged Particle Systems	5
Falkenhagen, H. and G. Kelbg. Comments on Conductivity in Solutions of Strong Electrolytes	17
Kelbg, G. Statistical Mechanics of Electrolytic Solutions. Conductivity	23
Card 2/10	28

SOV/2809

Thermodynamics and Structure (Cont.)

- Shakhparonov, M. I. Present Problems of the Thermodynamic Theory of Solutions of Nonelectrolytes 36
- Skripov, V. P. Fluctuation of Energy in Solutions and Their Relation to Heat Capacity 43
- Fisher, I. Z., and V. I. Kuz'mich. Molecular Theory of Solubility 48
- Krichevskiy, I. R., and N. Ye. Khazanova. Critical Phenomena in Binary Liquid Systems 49
- Nozdrev, V. F. Study of the Critical States of Individual Compounds and of Their Mixtures With the Aid of Ultrasonic Methods 56
- Bartenev, G. M., and A. A. Remizova. Phase Transitions in Simple Systems and Their Classification 67

Card 3/10

Thermodynamics and Structure (Cont.)

SOV/2809

Kudryavtsev, B. B. Use of Ultrasonic Measurements in the Study of Solutions	72
Sventoslavskiy, V. V., and K. I. Zemborak. Transformation of Binary Heteroazeotropes Into Homoazeotropes and Homozeotropes	79
Storonkin, A.V., and A. G. Morachevskiy. Applicability of Konovalov's and Vrevskiy's Laws to Ternary Solutions	87
Storonkin, A. V., and M. M. Shul'ts. Relation of Thermodynamic Properties of Saturated and Nearly Saturated Ternary Solutions to Their Composition	93
Mishchenko, K. P. Thermodynamic Properties of Water in Solutions of Electrolytes	97
Izmaylov, N. A. Dissociation of Electrolytes in Nonaqueous Solutions	105
Aleksandrov, V. V., and Ye. F. Ivanova. Thermodynamic Properties of Nonaqueous Solutions of Electrolytes	118

Card 4/10

Thermodynamics and Structure (Cont.)

SOV/2809

- Izmaylov, N. A., V. A. Kremer, L. M. Kutsyna, and Ye. V. Titov.
Study of the Effect of Solvents on the Strength of Acids by
Means of Optical Methods 122
- Nikol'skiy, B. P. Dissociation of Acids and Complex Compounds
and Methods of Studying It 126
- Yatsimirskiy, K. B. Change in Thermodynamic Functions in
Reactions of Association of Ions in Solutions 133
- Vasil'yev, V. P. Thermodynamics of "Aquacomplexes" 140
- Lengyel, Sandor. Study of Partial Pressure of Solvent in
Aqueous Solutions of Electrolytes 144
- Minc, Stefan. Interactions of Proton With Molecules (Water,
and Methyl, Ethyl and n-Propyl Alcohols) 152

Card 5/10

Thermodynamics and Structure (Cont.)

SOV/2809

- Styrikovich, M. A. Study of Solubility of Low Volatility Compounds in Water Vapor Under High Pressure 158
- Shchukarev, S. A., L. S. Lilich, and V. I. Timofeyev. Change in the Isobaric Potential When Salts Are Dissolved in Water 167
- Barkan, A. S. Effect of Additional Components on the Solubility of Compounds in Mixed Media 172
- Akhumov, Ye. I., and Ye. V. Pylkova. Solubility and Supersaturation in the System Sodium Sulfate - Water at High Temperatures 176
- Vatolin, N. A., and O. A. Yesin. Application of the Theory of Ideal Solutions to Liquid Iron Melts 179
- Sryvalin, I. T., and O. A. Yesin. Systems With Positive-Negative Deviations From Ideal Solutions 182
- Kozheurov, V. A. Thermodynamics of Ionic Solutions With an Arbitrary Number of Anions 186

Card 6/10

Thermodynamics and Structure (Cont.)	SOV/2809	
Tsiklis, D. S. Solutions of Nonelectrolytes at Superhigh Pressures		190
Yefremova, G. D. Solubility of Gases in Liquids Under Pressure		198
Starobinets, G. L., and V. F. Tikavyy. The Relationship Between Dielectric and Thermodynamic Properties of Binary Mixtures of Polar and Nonpolar Compounds		203
Starobinets, G. L., and N. G. Aliko. Thermodynamic Properties and Structures of Solutions of High-Molecular Paraffin Hydrocarbons in Benzene		207
Golik, A. Z. Viscosity and Structure of Solutions of Nonelectrolytes		215
Golik, A. Z. Viscosity and Structure of Solutions of Electrolytes		219
Card 7/10		

Thermodynamics and Structure (Cont.)	SOV/2809
Shakhparonov, M. I. Polarization and Structures of Solutions	224
Bartenev, G. M. Structure and Crystallization Mechanism of Liquid Eutectic	228
Roshchina, G. P. Molecular Dispersion of Light in Solutions of Nonelectrolytes	233
Shlenkina, N. G., and M. I. Shakhparonov. Verification of the Theory of Molecular Dispersion of Light by Means of Binary Solutions	239
Vuks, M. P. Anisotropic Dispersion of Light and Its Use in Studying Liquids and Solutions	242
Mishohenko, K. P., and A. M. Ponamareva. Partial Molal Entropies in Systems Acetic Acid - Water and Formic Acid - Water and the Structure of These Solutions	246

Card 8/10